brother®

TZ TAPE

P-touch 1850

USER'S GUIDE

- Read this User's Guide before you start using your P-touch.
- Keep this User's Guide in a handy place for future reference.

INTRODUCTION

Thank you for purchasing the P-touch 1850!
Your new P-touch will allow you to create labels for any need. Its versatility enables you to design custom labels by choosing from a variety of frame designs and from many characters sizes and styles. In addition, the four tape widths (6 mm, 9 mm, 12 mm and 18 mm) and variety of tape colours allow you to print personalised labels, useful for colour-coded filing.
You no longer have to worry about urgent tasks that require professional printing. In the office, the factory, the lab and the home, the quality and performance of the P-touch 1850 makes it an extremely practical machine.
Finally, as you may want to refer to this User's Guide occasionally, we suggest that you keep it in a handy place.

Declaration of Conformity

We BROTHER INDUSTRIES, LTD.
1-1-1, Kawagishi, Mizuho-ku,
Nagoya 467-8562, Japan
declare that the Labelling System PT-1850 conforms with the following normative documents:
EMC: EN 55022:1998 Class B
EN 55024:1998
EN 61000-3-2:1995
EN 61000-3-3:1995
and follows the provisions of the Electromagnetic Compatibility Directive 89/336/EEC (as amended by 91/263/EEC and 92/31/EEC). The AC adaptor also conforms with EN 60950 and follows the provisions of the Low Voltage Directive 73/23/EEC.
Issued by: BROTHER INDUSTRIES, LTD.
P & H company
Development DIV.

Use only the adaptor designed exclusively for this machine. See *GENERAL PRECAUTIONS* on page 3.

CONTENTS

Getting Started

GENERAL DESCRIPTION 1
GENERAL PRECAUTIONS 3
BATTERIES 3
AC ADAPTOR 4
TAPE CASSETTE 5
ATTACHING LABELS 6
PRINT HEAD & ROLLERS 10

For Your Information

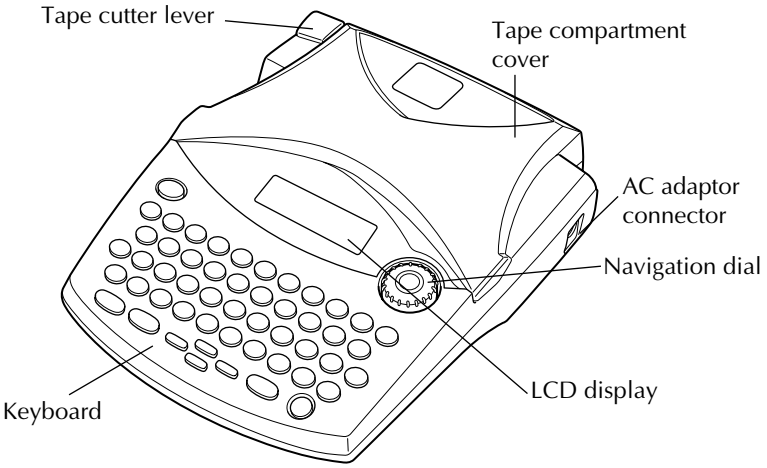
POWER KEY 11
CURSOR KEYS 11
NAVIGATION DIAL 13
CODE, ALT & SHIFT KEYS 13
SPACE KEY 16
RETURN KEY 16
TAB FUNCTION 17
DELETE KEY 19
LINE OUT FUNCTION 20
CLEAR FUNCTION 21
COMPOSITE CHARACTER KEYS 23
ACCENT FUNCTION 24
SYMBOL FUNCTION 26
AUTO FORMAT FUNCTION 27
FONT FUNCTION 29
SIZE & WIDE FUNCTIONS 30
STYLE FUNCTION 33
UNDERLINE FUNCTION 35
FRAME FUNCTION 36
TAPE MARGIN FUNCTION 38
HORIZONTAL ALIGNMENT FUNCTION 39
MIRROR PRINTING FUNCTION 40
LENGTH FUNCTION 42

PRINT KEY 43
FEED FUNCTION 44
NUMBERING FUNCTION 44
REPEAT PRINTING FUNCTION 46
CURRENCY CONVERSION FUNCTION 47
MEMORY FUNCTIONS 51
TROUBLESHOOTING 56
ERROR MESSAGE LIST 57
SPECIFICATIONS 60
ACCESSORIES 61
INDEX 64

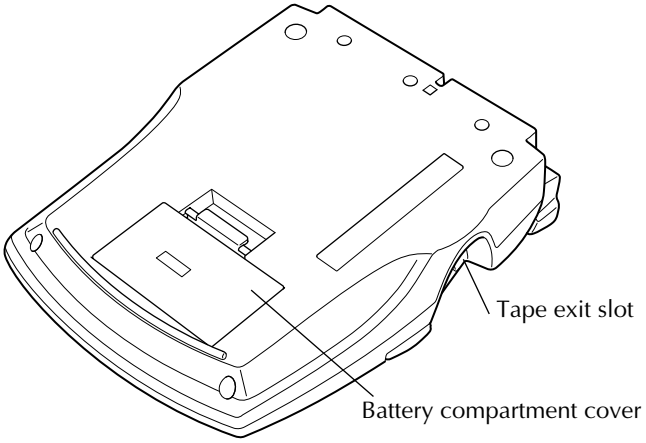
Getting Started

GENERAL DESCRIPTION

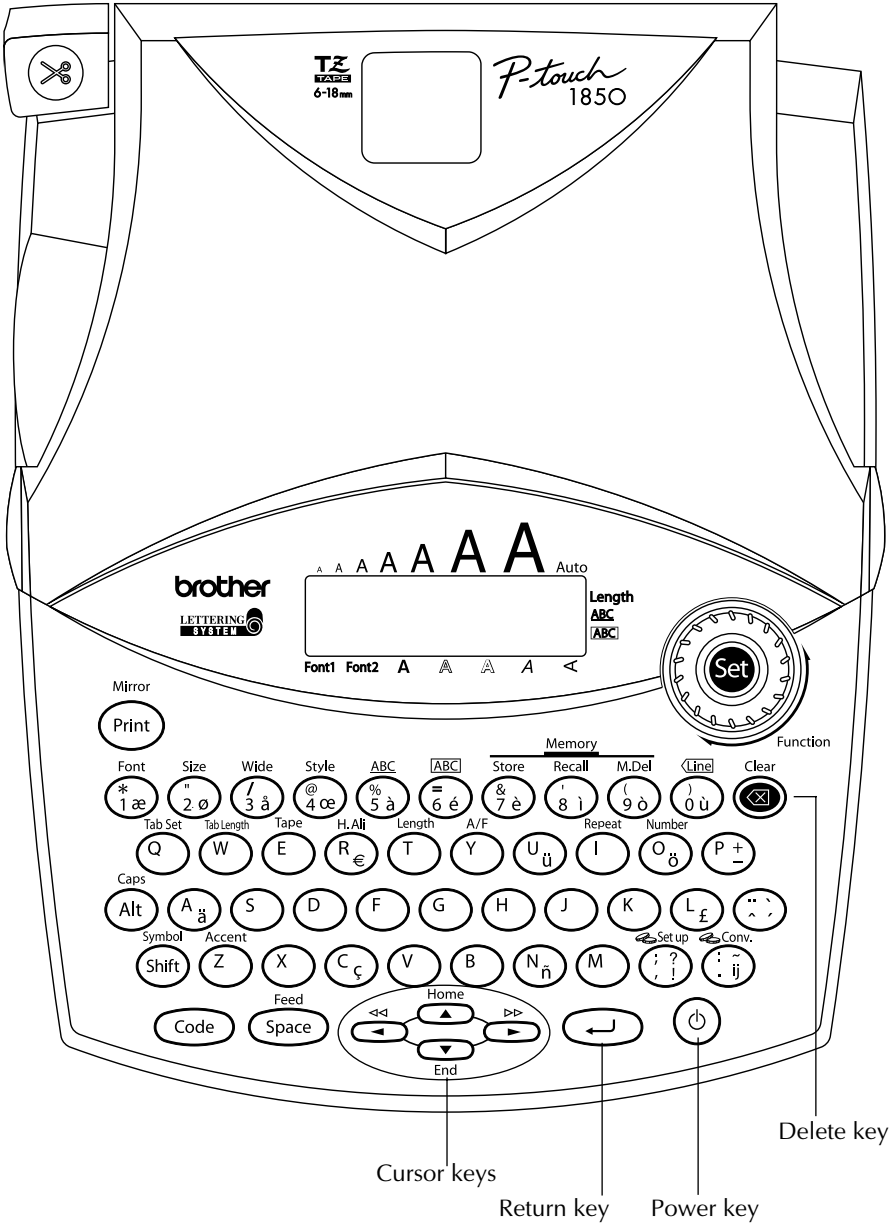
TOP VIEW



BOTTOM VIEW



KEYBOARD & LCD DISPLAY



GENERAL PRECAUTIONS

- Use only Brother TZ tapes with this machine. Do not use tapes that do not have the TZ mark.
- Do not pull on the tape being fed from the P-touch. This may damage the tape cassette.
- Do not use the machine in dusty places, and keep it out of both direct sunlight and rain.
- Do not expose the machine to high temperatures or high humidity. Never leave it on the dashboard or in the back of your car.
- Do not leave any rubber or vinyl on the machine for an extended period of time. Doing so may cause staining.
- Do not clean the machine with alcohol or other organic solvents. Use a soft, dry cloth only.
- Do not put any foreign objects into or anything on the machine.
- To avoid injuries, do not touch the cutter's edge.
- Use only the AC adaptor (model H or J) designed exclusively for this machine. Use of any other adaptor may void the warranty.
- Do not try to disassemble the AC adaptor.
- When the machine is not being used for a long period of time and it is not necessary to keep the text files stored in the memory, disconnect the AC adaptor, and remove the batteries to prevent them from leaking and damaging the machine.
- When the AC adaptor is connected, unplugging the adaptor from the electrical outlet before unplugging it from the machine can delete all text files in the memory, even if batteries are installed.
- **Use six AA alkaline batteries in this machine.**

BATTERIES

This portable machine can be used anywhere by installing six (6) **AA alkaline batteries**. When you change the batteries, always replace all six at the same time.

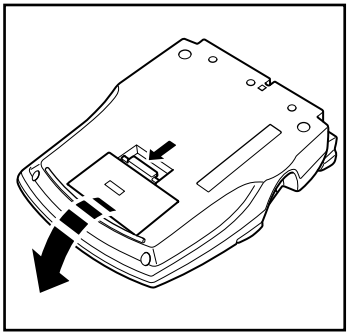
To change the batteries:

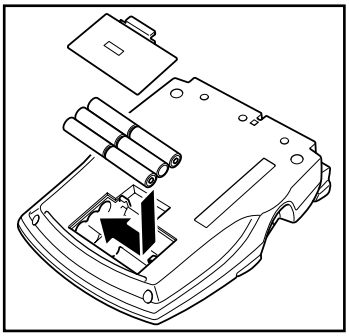
1. Remove the battery compartment cover on the back of the machine.
2. If batteries are already installed, remove them.
3. Insert six new AA alkaline batteries, making sure that their poles point in the correct direction.
4. Attach the battery compartment cover.

☞ *Be sure to insert the new batteries within five minutes of removing the old ones, otherwise the text shown in the display and any text files stored in the memory will be lost (unless the machine is plugged into an AC outlet with the AC adaptor).*

Remove the batteries and disconnect the AC adaptor if you do not intend to use this machine for an extended period of time. When the power is disconnected, all text shown in the display and stored in the memory will be lost.

If the batteries are not installed with their positive and negative poles pointing in the correct direction, the batteries may leak, overheat or explode, or the print head may overheat.





AC ADAPTOR

The AC adaptor (model H or J) allows you to use this machine wherever there is an electrical outlet.

To connect the AC adaptor:

❶ Insert the plug on the adaptor cord into the connector marked DC IN 9.5V on the right side of the machine.

❷ Insert the plug on the adaptor into the nearest standard electrical outlet.

☞ *Only use the AC adaptor designed exclusively for this machine.*

Remove the batteries and disconnect the AC adaptor if you do not intend to use this machine for an extended period of time. When the power is disconnected, all text shown in the display and stored in the memory will be lost.

When the AC adaptor is connected, unplugging the adaptor from the electrical outlet before unplugging it from the machine can delete all text files in the memory, even if batteries are installed.

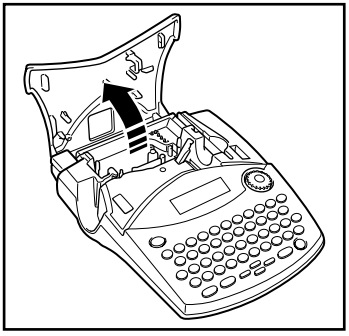
TAPE CASSETTE

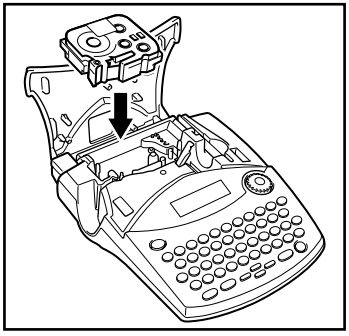
Two TZ tape cassettes are supplied with this unit. However, since TZ tape cassettes are available for this machine in a wide variety of colours and sizes, it is possible to make distinctive colour-coded and stylised labels.

In addition, this machine has been designed to allow you to change the tape cassettes quickly and easily.

To change the tape cassette:

1. Lift open the tape compartment cover. The installed cassette is also released.
2. If a tape cassette is already installed, remove it by pulling it straight up.
3. If the ink ribbon in the tape cassette to be installed is loose, use your finger to wind the toothed wheel in the direction of the arrow on the cassette until there is no slack in the ribbon.
   Also, make sure that the end of the tape feeds under the tape guides.
   ☞ *If you are using a new tape cassette provided with a stopper, be sure to remove the stopper.*
4. Insert the tape cassette firmly into the tape compartment, making sure that the entire back of the cassette touches the bottom of the compartment.
   ☞ *When inserting the tape cassette, make sure that the inner ribbon does not catch on the corner of the metal guide.*
5. Close the compartment cover, then turn on the machine if it is off.
6. Hold down Code and press Feed Space once to remove any slack in the tape, and then press the tape cutter lever to cut off the excess tape.



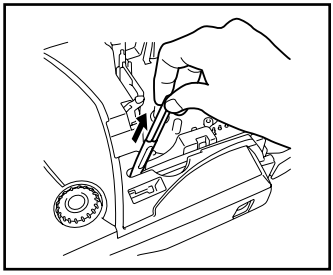


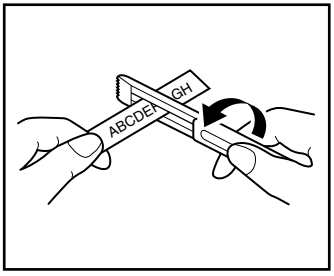
ATTACHING LABELS

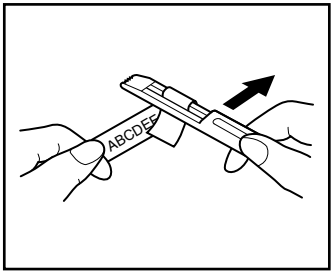
LAMINATED TAPE

The enclosed stick enables you to easily remove the backing from labels printed on laminated tapes.

1. Hold the tape in your left hand, with the printed surface facing up, and hold the stick in your right hand.
2. Pass the tape halfway through the long narrow hole in the stick.
3. Turn the stick three-quarters of a turn towards you and pull the stick away from you as shown below.
4. Peel off the label backing.

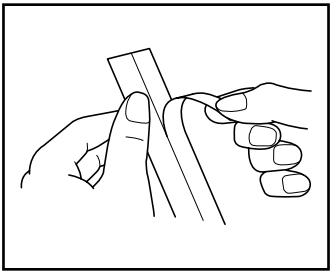






NON-LAMINATED TAPE

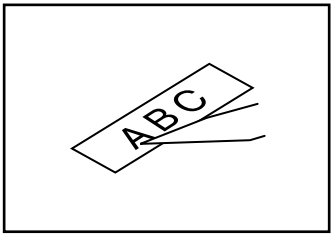
Labels printed on non-laminated tapes can be folded in half so that the inside edges of the two backing pieces come off the label, enabling the backing to easily be peeled off.



INSTANT-LETTERING TAPE (RUB-ON TRANSFERS)

Instant-lettering tape is used to transfer your text onto paper. After printing the text onto instant-lettering tape and cutting off the label, position the label with its non-printed side facing up on a sheet of paper. By simply rubbing the instant lettering tape's non-printed side with the enclosed stick, you can transfer the text directly onto the paper.

☞ *Hold the tape very firmly and do not move it while rubbing the tape.*



IRON-ON TRANSFER TAPE

Iron-on transfer tape is used to transfer your text onto garments using an iron.

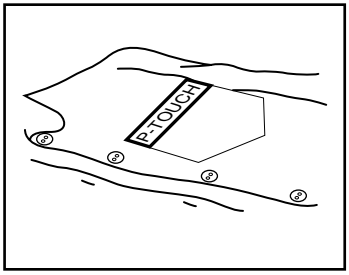
❶ Insert an iron-on transfer tape cassette, press (Mirror Print) to print the text, and then hold down (Code) and press (Feed Space) to feed out more tape. Next, push down on the tape cutter lever to cut off the label.

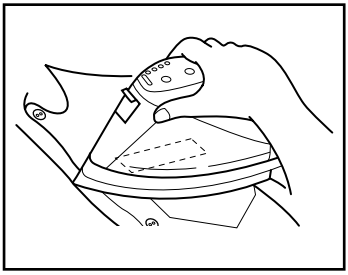
❷ Iron the garment to flatten it before transferring the text.

❸ Place the label on the garment at the location where you wish the text to be transferred.

❹ Set the iron to cotton (150 to 180 °C), and then press down on the label with the iron for about 15 seconds.

❺ Allow the iron-on transfer to cool (for about 60 seconds), and then carefully remove the backing paper.





☞ *White garments made from 100% cotton with a plain (smooth) surface are best for iron-on transfers.*
You can also make transfers to garments made from 100% linen or cotton/polyester blends as long as they have a plain (smooth) surface.
The label will not adhere properly to any cloth with a rough surface, such as pile or denim, or with a waterproof surface. Heat-sensitive materials, such as nylon, acetate or other similar fibres, are also unsuitable as they may be damaged when pressed with an iron at a high temperature.

Do not move the iron while pressing, otherwise the label may move out of the desired position. Press the iron straight down onto the cloth.

After the backing tape has been removed, the transferred label may appear glossy. In addition, some white spots may have appeared on the label if it was touched while the backing tape was peeled off. These can be removed by ironing over the label with a piece of cloth placed between the label and the iron.

Since the transferred label cannot be removed once it is applied, make all transfers with care.

Washing:

Garments with transfer labels can be washed over 20 times if the label has been transferred correctly. Normal biological and non-biological household detergents may be used.

The label may become discoloured if the garment is placed in bleach for an extended length of time.

Be careful that hard objects such as buckles or buttons do not come into contact with the label during the wash.

Do not dry clean garments which have had transfer labels applied.

Drying:

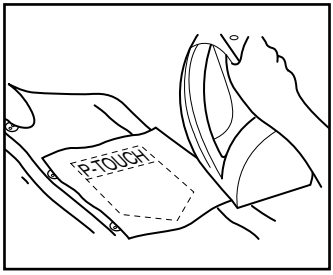
Garments with transfer labels may be dried either inside or outside out.

Do not tumble dry. The transfers will come off and may stick to other items of clothing.

Ironing:

Iron garments with transfers using normal temperature settings.

Be sure to place a piece of cloth between the iron and the label when you iron over it to prevent the label from sticking to the iron.



The labels are non-toxic, however, please maintain the usual precautions, such as not placing them in your mouth, etc.

Do not store the tape cassette in areas exposed to direct sunlight, high humidity or dust.

FABRIC TAPE

Fabric tape is used to attach a piece of fabric printed with your text onto garments using an iron. After printing the text onto fabric tape and cutting off the label using scissors, place the label on an ironed garment at the location where you wish to attach it in such a way that the printed text can be read correctly. Cover the label with another piece of cloth and use an iron set to a medium-high temperature (160 to 180 °C) to press down firmly for 15 to 30 seconds. For more details, refer to the instructions included with the fabric tape cassette.

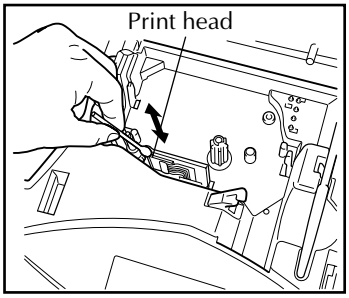
PRINT HEAD & ROLLERS

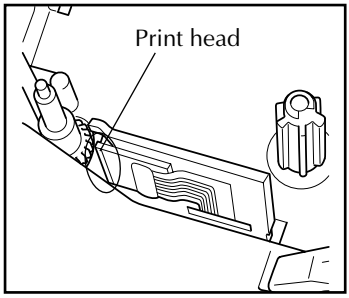
Occasionally, specks of dust or dirt become attached to the machine's print head and rollers. This is particularly likely when you are using the unit outdoors or in a very dusty environment. If a section of the print head is covered with dust, a blank horizontal streak may appear through the label text. Therefore, as with a tape recorder, the machine's print head may need to be cleaned from time to time.

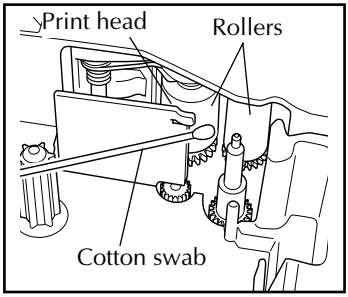
To clean the print head and rollers:

1. Turn off the machine.
2. Open the tape compartment cover, then remove the tape cassette if one is installed. The print head and rollers are located in the tape compartment.
3. Print head: Use a dry cotton swab to gently wipe the print head with an up-and-down motion.
   Rollers: Use a dry cotton swab to wipe each roller with an up-and-down motion while rotating them with your finger.
4. Install a tape cassette, close the tape compartment cover, and then try printing again.
5. If a blank streak still appears in the label, repeat steps 3 and 4 using a cotton swab dipped in isopropyl (rubbing) alcohol.

If none of the above works, contact your service representative.







☞ *The print head can be cleaned more easily if the optional print head cleaning cassette (TZ-CL4) is used.*

For Your Information

POWER KEY

The power key (⏻) is located in the lower-right corner of the keyboard. If batteries have been installed or the machine has been plugged in using the AC adaptor, the previous session's information is displayed when the machine is turned on. This feature allows you to stop work on a label, turn off the machine, and return to it later without having to re-enter the text.

The machine will automatically turn off if no key is pressed within 5 minutes. The machine's internal memory stores the current session's information and displays it when you turn on the machine again.

To turn on the machine:

- Press ⏻. The previous session's information appears in the LCD display.

To turn off the machine:

- Press ⏻. The current session's information is stored in the internal memory.

CURSOR KEYS

The machine's LCD display shows two rows of 9 characters; however, the text that you create can be up to 99 characters long. You can review and edit your text by using the cursor keys to move the cursor so that different parts are shown in the display.

LEFT CURSOR KEY

To move the cursor one character to the left:

- Press ◄ once.

  ☞ *If this key is pressed when the cursor is at the beginning of a line following another line, the cursor moves to the end of the previous line.*

To move the cursor several characters to the left:

- Hold down ◄ until the cursor moves to the desired position.

To move the cursor to the beginning of the current line:

- Hold down Code and press ◄.

RIGHT CURSOR KEY

To move the cursor one character to the right:

- Press ▷▷ ► once.

  ☞ *If this key is pressed when the cursor is at the end of a line followed by another line, the cursor moves to the beginning of the next line.*

To move the cursor several characters to the right:

- Hold down ▷▷ ► until the cursor moves to the desired position.

To move the cursor to the end of the current line:

- Hold down Code and press ▷▷ ►.

UP CURSOR KEY

To move the cursor up to the previous line:

- Press Home ▲ once.

  ☞ *If the cursor is in the first line of text, it will move to the beginning of the line.*

To move the cursor up several lines:

- Hold down Home ▲ until the cursor moves to the desired line.

To move the cursor to the beginning of the entire text:

- Hold down Code and press Home ▲.

DOWN CURSOR KEY

To move the cursor down to the following line:

- Press ▼ End once.

  ☞ *If the cursor is in the last line of text, it will move to the end of the line.*

To move the cursor down several lines:

- Hold down ▼ End until the cursor moves to the desired line.

To move the cursor to the end of the entire text:

- Hold down Code and press ▼ End.

NAVIGATION DIAL

The navigation dial in the upper-right corner of the keyboard provides a quick way to access many of the P-touch functions and to select from the various settings. Refer to the description of each function for a detailed explanation on how to use the navigation dial.

To select a function or setting:

- Rotate (Set) either clockwise or counterclockwise until the desired function or setting is displayed.

☞ *To return to the text without making a selection, press* (Clear).

To apply the selection:

- Press (Set). If a function was selected, the current setting is displayed. If a setting was selected, it is applied to the text.

CODE, ALT & SHIFT KEYS

Most characters can be entered simply by pressing their keys. However, to use special functions or to enter uppercase letters, accented characters and some symbols, the following special keys are necessary.

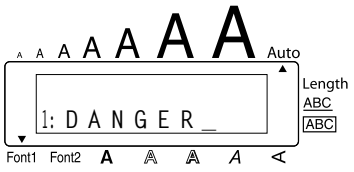
CODE KEY

To use a function printed above a key:

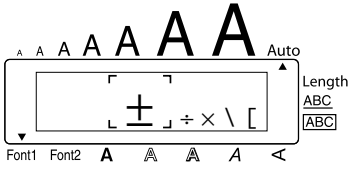
- Hold down (Code) and press the key immediately below the desired function.

EXAMPLE

To start the Symbol function:



- Hold down (Code) and press (Shift) (Symbol) once.



ALT KEY

To type in characters printed in color on the right-hand side of the keys:

❶ Press Caps Alt once to enter **Alt** mode. The **Alt** indicator on the left side of the display comes on.

❷ To type in a character written in colour in the lower-right corner of the key, press the key of the desired character.

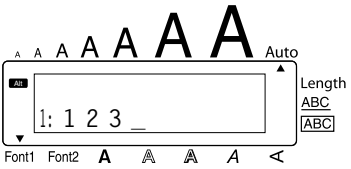
To type in a character written in colour in the upper-right corner of the key, hold down Symbol Shift and press the key of the desired character.

❸ To exit **Alt** mode, press Caps Alt again. The **Alt** indicator goes off.

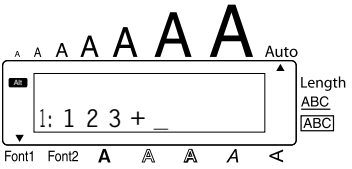
EXAMPLE

To type in "+":

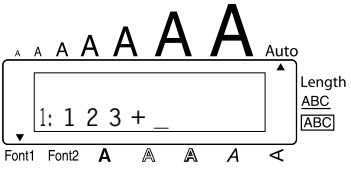
❶ Press Caps Alt once. The **Alt** indicator comes on.



❷ Hold down Symbol Shift and press P +/_.



❸ Press Caps Alt again.



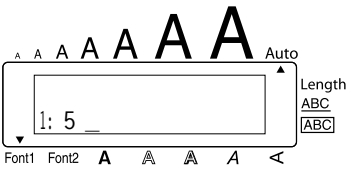
SHIFT KEY

To type in an uppercase letter or a symbol printed in the top left-hand corner of a key:

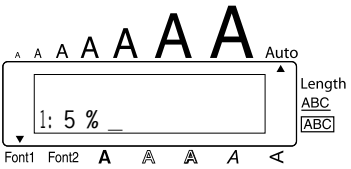
- Hold down (Symbol Shift) and press the key of the desired letter or symbol.

EXAMPLE

To type in "%":



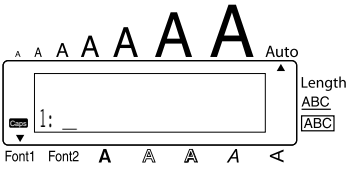
- Hold down (Symbol Shift) and press (ABC % 5 à).



The **Caps** mode is similar to holding down (Symbol Shift). It allows you to type uppercase letters continuously.

To type in many uppercase letters:

❶ Hold down (Code) and press (Caps Alt). The **Caps** indicator on the left side of the display comes on.



❷ Press the keys of the desired letters or symbols.

❸ To exit **Caps** mode, hold down (Code) and press (Caps Alt). The **Caps** indicator goes off.

SPACE KEY

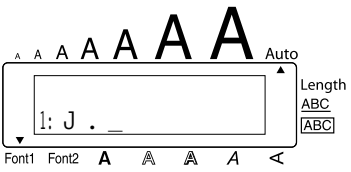
The **Space** key (Feed Space) lets you add blank spaces between characters in your text. It is different from the right cursor key (▷▷), which just moves the cursor without adding blank spaces.

To add a space:

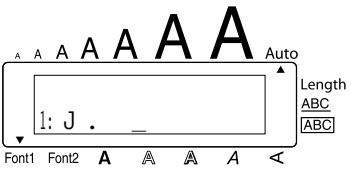
- Press Feed Space.

EXAMPLE

To add a space:



- Press Feed Space.



RETURN KEY

Like on a typewriter or word processor, this machine's return key (↵) is used to end a line of text and start another one. When you have finished entering one line, press the return key to make a new line and move the cursor to it.

☞ *A label can only contain a maximum of five text lines. If you press ↵ when five lines already exist, the error message "5 LINE LIMIT!" will appear.*

Tape widths	Maximum number of lines that can be printed
6 mm	2
9 mm	2
12 mm	3
18 mm	5

The return key can also be used to select an item from a list (e.g., add a symbol or accented character to the text) or to apply a selected setting.

Some questions asking you to confirm a command may appear on the LCD display, especially when the function that you have chosen will delete or affect files. In these cases, pressing (↵) is like answering "yes".

☞ *To answer "no", press* (Clear ⌫)*. Refer to* DELETE KEY *on page 19.*

To add a new line:

- Press (↵). The return mark (↲) appears to indicate the end of the line.

To select an item from a list:

- Press (↵).

To answer "yes":

- Press (↵).

TAB FUNCTION

This function allows you to separate sections of a line of text by adding tabs. This enables you to create perfectly aligned columns without having to type in several spaces. All tabs have the same length and are measured from either the beginning of the line or the previous tab if there is more than one. The tab length can be set between 0.0 and 30.0 cm.

☞ *The text can contain no more than 50 tabs. If the maximum number of tabs has already been added to the text when* (Code) *is held down and* (Tab Set Q) *is pressed, the error message "TAB LIMIT!" appears.*

Part No.	Product	Price
8667	Printer	€300
122960	Fax	€100

To set the tab length:

1. Rotate (Set) until **08/18 TAB LENGTH** is displayed, and then press (Set) (OR hold down (Code) and press (W Tab Length) once). The current tab length is displayed.
2. Rotate (Set) (OR press (▲ Home) or (▼ End)) until the desired length is displayed, or use the number keys to type in the length.
3. Press (Set) (OR press (↵)).

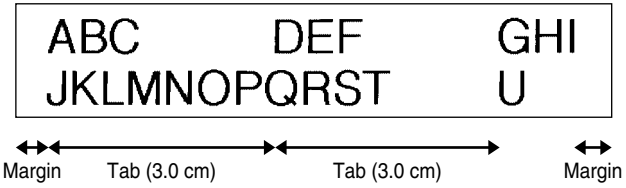
To add a tab to the text:

- Hold down (Code) and press (Q Tab Set) once. The tab mark (T) appears in the text to indicate the position of the tab.

  ☞ *If the text in front of a tab extends past the point where the next section of text should start, the text will instead start at the following tab position.*
  For example, if the tab length is set to 3.0 cm and the following text is typed in:

  1: A B C T D E F T G H I ↵
  2: J K L M N O P Q R S T T U

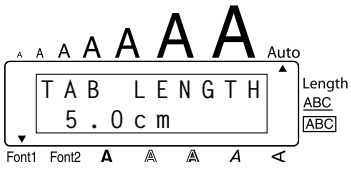
  the label shown below will be printed.



EXAMPLE

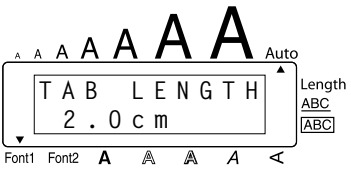
To set the tab length to 2.0 cm:

1. Rotate (Set) until **08/18 TAB LENGTH** is displayed, and then press (Set) (OR hold down (Code) and press (W Tab Length) once).



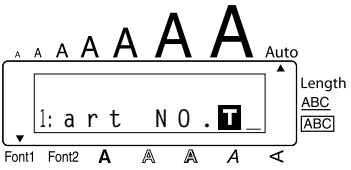
❷ Rotate Set (OR press End) until **2.0cm** is displayed.

❸ Press Set (OR press ↵).



To add a tab to the text:

- Hold down Code and press Tab Set Q once.



DELETE KEY

The delete key (Clear ⌫) allows you to remove characters to the left of the cursor's current position. It differs from the left cursor key (◁◁ ◄), which only moves the cursor without deleting any characters.

The delete key can also be used to quit most functions and return to the previous display without changing the text.

Some questions asking you to confirm a command may appear on the LCD display, especially when the function that you have chosen will delete or affect files. In these cases, pressing Clear ⌫ is like answering "no".

☞ *To answer "yes", press ↵. Refer to* RETURN KEY *on page 16.*

To delete one character:

❶ Press ◁◁ ◄, ▷▷ ►, Home ▲ or ▼ End to position the cursor below the character immediately to the right of the character that you wish to delete.

❷ Press Clear ⌫ once.

To delete a sequence of characters:

❶ Press ◁◁, ▷▷, Home ▲ or ▼ End to position the cursor below the character immediately to the right of the last character that you wish to delete.

❷ Hold down Clear ⌫ until all of the characters that you wish to delete are deleted.

To quit a function without changing your text:

- Press Clear ⌫ to return to your text.

To answer "no":

- Press Clear ⌫.

LINE OUT FUNCTION

With the **Line Out** function, you can easily remove an entire line of text.

To delete a line of text:

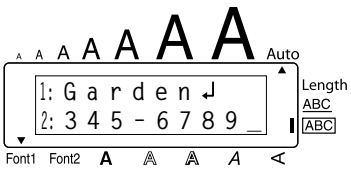
❶ Press ◁◁, ▷▷, Home ▲ or ▼ End to position the cursor within the line of text that you wish to delete.

❷ Hold down Code and press Line 0 ù once.

☞ *Each time Line 0 ù is pressed while Code is held down, one line of text is deleted.*

EXAMPLE

To delete "012-345-6789":



- Hold down Code and press Line 0 ù once.

CLEAR FUNCTION

When clearing the display before entering new text, the **Clear** function can be used to choose whether all of the text is erased and all format functions (**Font**, **Size**, **Wide**, **Style**, **Underline**, **Frame**, **Tape margin**, **Alignment**, **Tab length**, **Mirror printing**, and **Length**) are returned to their default settings, or whether just the text is erased.

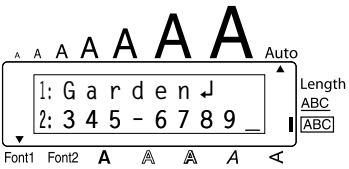
To delete all of the text and return all formats to their default settings:

1. Hold down Code and press Clear.
2. Rotate Set (OR press Home or End) until **TXT&FORMAT** is selected (flashing).

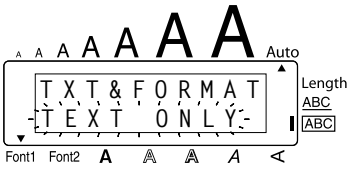
   ☞ *To return to the text without erasing anything, press Clear.*
3. Press Set (OR press ↵).

EXAMPLE

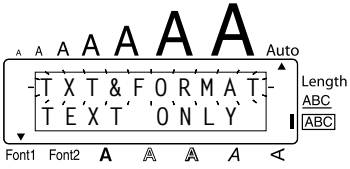
To clear the text and formats:



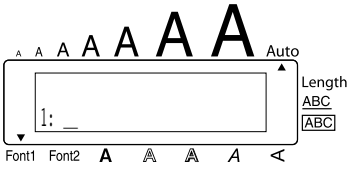
1. Hold down Code and press Clear.



2. Rotate Set (OR press Home) until **TXT&FORMAT** is flashing.



3. Press Set (OR press ↵).



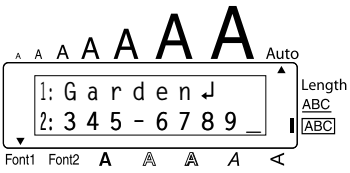
To delete just the text:

1. Hold down Code and press Clear.
2. Rotate Set (OR press Home or End) until **TEXT ONLY** is selected (flashing).

   ☞ *To return to the text without erasing anything, press Clear.*
3. Press Set (OR press ↵).

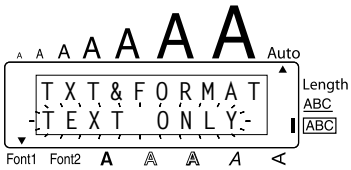
EXAMPLE

To clear just the text:

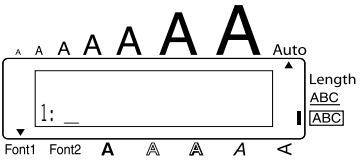


1. Hold down Code and press Clear.

2. Rotate Set (OR press End) until **TEXT ONLY** is flashing.



3. Press Set (OR press ↵).



COMPOSITE CHARACTER KEYS

This machine can display and print composite characters, which consist of a letter and a diacritical mark. The diacritical marks available are ^, ¨, ´, ` and ~.

Several composite characters can be found on the key tops. Characters such as ü, ç, and ñ can be entered using Caps Alt. Before inputting a composite character as described below, check whether it is already available as a keytop character.

The following diacritical mark and letter combinations are available:

Diacritical Marks	Letters Which Can Be Combined
^	a e i o u A E I O U
¨	a e i o u y A E I O U
´	a e i o u A E I O U
`	a e i o u A E I O U
~	a n o A N O

To type in a composite character:

1. To type in a diacritical mark written in colour on the key, press Caps Alt once. The **Alt** indicator comes on.
   To type in a diacritical mark written in the top half of the key, hold down Symbol Shift.
2. Press the key (¨ ^ or Conv. ~ ij) of the desired diacritical mark. The diacritical mark is added to the text.
3. Press the key of the letter that you wish to combine with the diacritical mark. The letter is combined with the diacritical mark and added to the text.

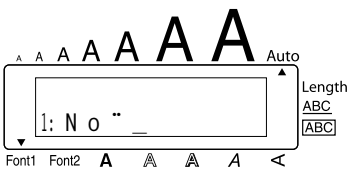
   ☞ *If the letter of the key that you pressed cannot be combined with the diacritical mark (see the above table), only the letter is added to the text.*

EXAMPLE

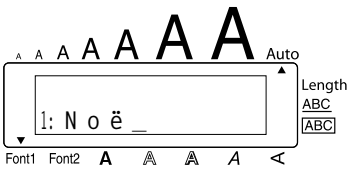
To add the composite character "ë" to the text:

1. Hold down Symbol Shift and press ¨ ^ once.

☞ *Make sure that the **Alt** indicator is off.*



❷ Press Tape (E).



ACCENT FUNCTION

The **Accent** function can also be used to add accented characters to your text. Many of these characters can also be found on the keys and typed in using Caps (Alt) (refer to page 13), or they can be entered using the composite character keys (refer to page 23).

The accented characters are grouped according to the uppercase or lowercase letter that they are combined with. The following accented characters are available:

Letters	Accented characters	Letters	Accented characters
A	Ä Á À Â Ã Å Æ	N	Ñ
a	ä á à â ã å æ	n	ñ
C	Ç	O	Ö Ó Ò Ô Õ Ø Œ
c	ç	o	ö ó ò ô õ ø œ
E	Ë É È Ê	U	Ü Ú Ù Û
e	ë é è ê	u	ü ú ù û
I	Ï Í Ì Î	y	ÿ
i	ï í ì î		

To type in an accented character:

❶ Rotate (Set) until **17/18 ACCENT** is displayed, and then press (Set) (OR hold down (Code) and press Accent (Z)). The message "ACCENT a – y / A – U?" appears on the display.

❷ Rotate (Set) (OR press the key of the letter in the desired accented character, and then press (◄) or (►)) until the desired accented character appears enlarged within the frame in the middle of the display.

☞ *To type an uppercase letter, hold down* Shift (Symbol) *(OR hold down* Code *and press* Alt (Caps) *to turn on* ***Caps*** *mode) before pressing the letter key.*

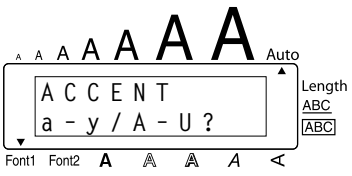
❸ Press Set (OR press ↵). The accented character is added to the text.

☞ *To type in a series of accented characters, hold down* Code *before pressing* Set *(OR* ↵*). Then, continue adding accented characters by selecting them as explained in step* ❷*, and holding down* Code *while pressing* Set *(OR* ↵*). Press just* Set *(OR* ↵*) after selecting the last character in the series.*

EXAMPLE

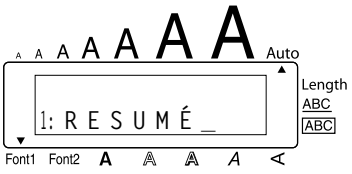
To add the accented character "É":

❶ Rotate Set until **17/18 ACCENT** is displayed, and then press Set (OR hold down Code and press Accent Z).



❷ Rotate Set (OR hold down Symbol Shift and press Tape E, and then press ▷▷ ►) until **É** appears in the frame.

❸ Press Set (OR press ↵).



SYMBOL FUNCTION

In addition to the letters, symbols and numerals on the key tops, there are 57 additional marks available with the **Symbol** function.

The following symbols are available:

Group	Symbol
1	± ÷ × \ [ ] < > ≪ ≫ • ¿
2	¡ # § β ª º Ð ð Þ þ µ ¼
3	° ☎ $ DM Fr *f* ★ ← → ↑ ↓ ▯
4	☞ ☜ ☠ ♪ ⚠ ⚠ ○ | ⊕ ⏻ ⏻ ⏻
5	⧈ ~ ⎓ ⊣⊢ ⏚ ⏦ CE _ ~

To type in a symbol:

❶ Rotate (Set) until **16/18 SYMBOL** is displayed, and then press (Set) (OR hold down (Code) and press (Shift) (Symbol)). A row of symbols appear in the display.

❷ Rotate (Set) (OR press (▲) (Home) or (▼) (End) to select the desired row of symbols and press (◄◄) or (►►) to select the different symbols) until the desired symbol appears enlarged within the frame in the middle of the display.

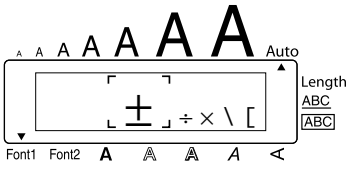
❸ Press (Set) (OR press (↵)). The symbol is added to the text.

☞ *To type in a series of symbols, hold down (Code) before pressing (Set) (OR (↵)). Then, continue adding symbols by selecting them as explained in step ❷, and holding down (Code) while pressing (Set) (OR (↵)). Press just (Set) (OR (↵)) after selecting the last symbol in the series.*

EXAMPLE

To add the symbol "☠":

❶ Rotate (Set) until **16/18 SYMBOL** is displayed, and then press (Set) (OR hold down (Code) and press (Shift) (Symbol)).



❷ Rotate Set (OR press Home ▲ or ▼ End until the row containing "☠" appears, and then press ◄◄ ◄ or ► ►►) until "☠" appears in the frame.

❸ Press Set (OR press ↵).

AUTO FORMAT FUNCTION

With the **Auto format** function, you can select from a variety of preset formats, allowing you to quickly and easily create the perfect label for your specific need. After simply selecting one of the pre-formatted layouts, the label length, tape margin and horizontal alignment are automatically adjusted without changing the text or any other format settings.
The following preset formats are available:

Auto format setting	Length setting	Tape margin setting	Horizontal alignment setting
DEFAULT	OFF	FULL	LEFT
3.5" FLOPPY	7.0 cm	NARROW	CENTRE
miniDV	4.3 cm	NARROW	CENTRE
VCR-VHS B	14.0 cm	NARROW	CENTRE
VCR-VHS	7.7 cm	NARROW	CENTRE
VCR8mm CASE	9.2 cm	NARROW	CENTRE
VCR8mm	7.3 cm	NARROW	CENTRE
VCR-VHSC B	4.5 cm	NARROW	CENTRE
VCR-VHSC	5.8 cm	NARROW	CENTRE

Auto format setting	Length setting	Tape margin setting	Horizontal alignment setting
AUDIO CASSETTE	8.9 cm	NARROW	CENTRE
DAT CASSETTE	5.6 cm	NARROW	CENTRE
MINI DISK	5.2 cm	NARROW	CENTRE
ORGANISER L	8.2 cm	NARROW	CENTRE
ORGANISER S	6.5 cm	NARROW	CENTRE
FILE LONG	18.3 cm	NARROW	CENTRE
FILE SHORT	9.4 cm	NARROW	CENTRE

To select a pre-formatted layout:

❶ Rotate Set until **12/18 A.FORMAT** is displayed, and then press Set (OR hold down Code and press A/F Y).

❷ Rotate Set (OR press Home ▲ or ▼ End) to select the desired format.

☞ *The default setting (**DEFAULT**) can be selected by pressing Feed Space.*

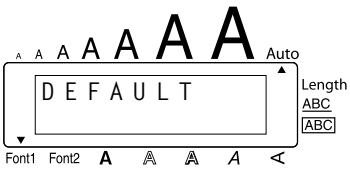
❸ Press Set (OR press ↵).

☞ *The **Length** indicator comes on if any setting other than **DEFAULT** is selected.*

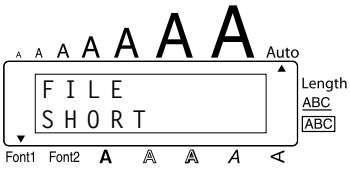
EXAMPLE

To select the FILE SHORT setting:

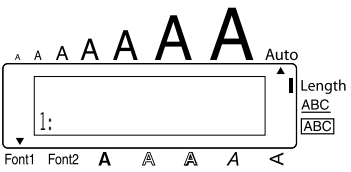
❶ Rotate Set until **12/18 A.FORMAT** is displayed, and then press Set (OR hold down Code and press A/F Y).



❷ Rotate Set (OR press Home ▲ or ▼ End) until format **FILE SHORT** is displayed.



❸ Press Set (OR press ↵).



FONT FUNCTION

With the **Font** function, you can choose one of two fonts for your text.
The following font settings are available:

FONT 1	FONT 2
(Helsinki)	(Brussels)

The default font setting is **FONT 1**. The font indicator at the bottom left of the display shows the currently selected font setting.

To change the font setting:

❶ Rotate Set until **01/18 FONT** is displayed, and then press Set to display the current font setting.

❷ Rotate Set until the desired font setting is displayed, and then press Set to apply it to the text.

OR

❶ While holding down Code, press Font (* 1 æ) once, and keep Code held down to display the current font setting.

❷ While still holding down Code, continue pressing Font (* 1 æ) until the desired font setting is displayed.

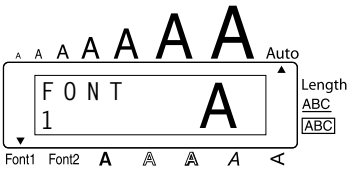
❸ Release Code to apply the selected font setting to the text.

☞ *The current font setting is shown by the font indicator at the bottom left of the display.*

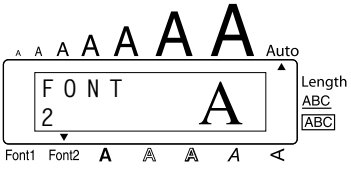
EXAMPLE

To select the FONT 2 font setting:

❶ While holding down Code, press Font (*1 æ) once, and keep Code held down.



❷ While still holding down Code, continue pressing Font (*1 æ) until **FONT 2** is displayed.



❸ Release Code.

SIZE & WIDE FUNCTIONS

The character size can be adjusted using both the **Size** and **Wide** functions. Since the character size that can be used depends on the width of the tape, the following table shows the character sizes that can be used with each tape width.

Tape widths	Sizes (in points)
6 mm	6, 9, 12
9 mm	6, 9, 12, 18
12 mm	6, 9, 12, 18, 24
18 mm	6, 9, 12, 18, 24, 36, 42

The default size setting is **AUTO** and the default wide setting is **OFF**. The currently selected size setting is always shown by the indicators above the display.

With the **AUTO** size setting, the machine compares your text with the width of the installed tape and automatically adjusts the characters to the largest possible size. However, seven other point sizes are also available, and each can be printed with either of the two width settings.

☞ *With the **AUTO** setting selected and 12-mm- or 18-mm-wide tape installed, text consisting of just one line of only uppercase letters (and no accented characters) will be printed with a character size slightly larger than a similar sentence also containing lowercase letters (i.e., 29 points for 12-mm-wide tape and 52 points for 18-mm-wide tape).*

Size setting (in points)	Wide setting OFF	Wide setting ON
6	ABC	ABC
9	ABC	ABC
12	ABC	ABC
18	ABC	ABC
24	ABC	ABC
36	ABC	ABC
42	ABC	ABC

To change the size setting:

❶ Rotate (Set) until **02/18 SIZE** is displayed, and then press (Set) to display the current size setting.

❷ Rotate (Set) until the desired size setting is displayed, and then press (Set) to apply it to the text.

OR

❶ While holding down (Code), press (Size " 2 ø) once, and keep (Code) held down to display the current size setting.

❷ While still holding down (Code), continue pressing (Size " 2 ø) until the desired size setting is displayed.

❸ Release (Code) to apply the selected size setting to the text.

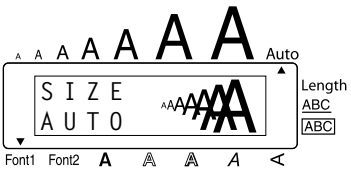
☞ *The current size setting is shown by the size indicators at the top of the display.*

If the selected character size is too large for the installed tape cassette, the message "CHR SIZE AUTO?" appears when Print *is pressed. Pressing* Print *(or* ↵ *) changes the character size to the maximum possible for the installed tape and continues printing. To stop the character size from being changed and stop printing, press* ⌫ *.*

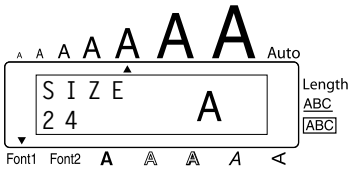
EXAMPLE

To select the 24 point size setting:

❶ While holding down Code, press Size 2 ø once, and keep Code held down.



❷ While still holding down Code, continue pressing Size 2 ø until **24** is displayed.



❸ Release Code.

To change the wide setting:

❶ Rotate Set until **03/18 WIDE** is displayed, and then press Set to display the current wide setting.

❷ Rotate Set until the desired wide setting is displayed, and then press Set to apply it to the text.

OR

❶ While holding down Code, press Wide 3 å once, and keep Code held down to display the current wide setting.

❷ While still holding down Code, continue pressing Wide 3 å until the desired wide setting is displayed.

❸ Release Code to apply the selected wide setting to the text.

EXAMPLE

To select the ON wide setting:

❶ While holding down Code, press Wide / 3 å once, and keep Code held down.

❷ While still holding down Code, continue pressing Wide / 3 å until **ON** is displayed.

❸ Release Code.

STYLE FUNCTION

You can choose from nine different character styles to apply to your text.

☞ *Characters printed using the smaller sizes may be difficult to read if certain style settings (e.g., **I+SHAD**) are selected.*

The following style settings are available:

NORMAL, **BOLD**, **OUTLINE**, **SHADOW**, **ITALIC**, **I+BOLD** (italic & bold), **I+OUTL** (italic & outline), **I+SHAD** (italic & shadow), **VERT** (vertical)

The default style setting is **NORMAL**. The style indicator at the bottom right of the display shows the current style setting when any setting other than **NORMAL** is selected.

Refer to *Reference* at the end of this section for samples of the available settings.

To change the style setting:

❶ Rotate Set until **04/18 STYLE** is displayed, and then press Set to display the current style setting.

❷ Rotate Set until the desired style setting is displayed, and then press Set to apply it to the text.

OR

❶ While holding down Code, press Style @ 4 œ once, and keep Code held down to display the current style setting.

❷ While still holding down Code, continue pressing Style @ 4 œ until the desired style setting is displayed.

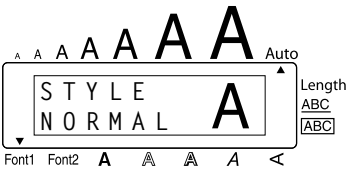
❸ Release Code to apply the selected style setting to the text.

☞ *The current style setting is shown by the style indicator at the bottom right of the display.*

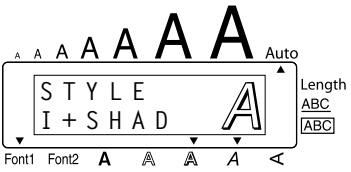
EXAMPLE

To select the I+SHAD style setting:

❶ While holding down Code, press Style @ 4 œ once, and keep Code held down.



❷ While still holding down Code, continue pressing Style @ 4 œ until **I+SHAD** is displayed.



❸ Release Code.

REFERENCE

Font setting	Style setting				
	NORMAL	BOLD	OUTLINE	SHADOW	ITALIC
FONT 1	ABC	ABC	ABC	ABC	*ABC*
FONT 2	ABC	ABC	ABC	ABC	*ABC*

Font setting	Style setting			
	I+BOLD	I+OUTL	I+SHAD	VERT
FONT 1	ABC	ABC	ABC	A B C
FONT 2	ABC	ABC	ABC	A B C

UNDERLINE FUNCTION

You can emphasise your text by underlining it.
The default underline setting is **OFF**. When the **Underline** function is set to **ON**, the underline indicator (**ABC**) on the right side of the display comes on.

UNDL
ON

(Sample)

To change the underline setting:

❶ Rotate (Set) until **05/18 UNDERLINE** is displayed, and then press (Set) to display the current underline setting.

❷ Rotate (Set) until the desired underline setting is displayed, and then press (Set) to apply it to the text.

OR

❶ While holding down (Code), press (ABC % 5 à) once, and keep (Code) held down to display the current underline setting.

❷ While still holding down (Code), continue pressing (ABC % 5 à) until the desired underline setting is displayed.

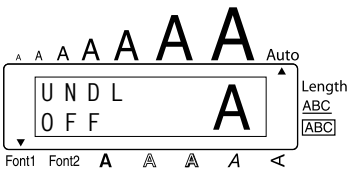
❸ Release (Code) to apply the selected underline setting to the text.

☞ *The underline indicator (**ABC**) comes on when the **ON** setting is selected.*

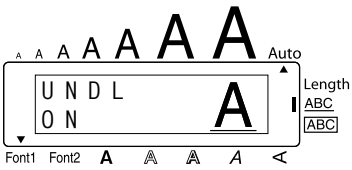
EXAMPLE

To select the ON underline setting:

❶ While holding down Code, press ABC % 5 à once, and keep Code held down.



❷ While still holding down Code, continue pressing ABC % 5 à until **ON** is displayed.



❸ Release Code.

FRAME FUNCTION

With the **Frame** function, you can choose from various frames and highlights to design a more decorative or emphasised label.

The default setting is **OFF**; however, 5 frame settings are also available. Refer to *Reference* at the end of this section for samples of the available settings.

When any setting other than **OFF** is selected, the ABC indicator on the right side of the display comes on.

To change the frame setting:

❶ Rotate Set until **06/18 FRAME** is displayed, and then press Set to display the current frame setting.

❷ Rotate Set until the desired frame setting is displayed, and then press Set to apply it to the text.

OR

❶ While holding down Code, press ABC = 6 é once, and keep Code held down to display the current frame setting.

❷ While still holding down Code, continue pressing ABC 6 é until the desired frame setting is displayed.

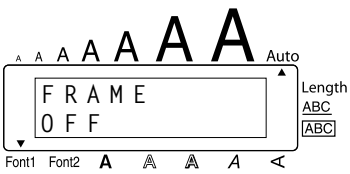
❸ Release Code to apply the selected frame setting to the text.

☞ *The* ABC *indicator comes on when a setting other than* ***OFF*** *is selected.*

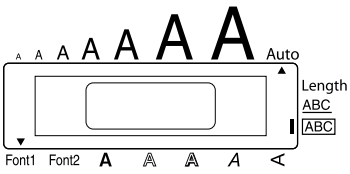
EXAMPLE

To select the rounded frame setting:

❶ While holding down Code, press ABC 6 é once, and keep Code held down.

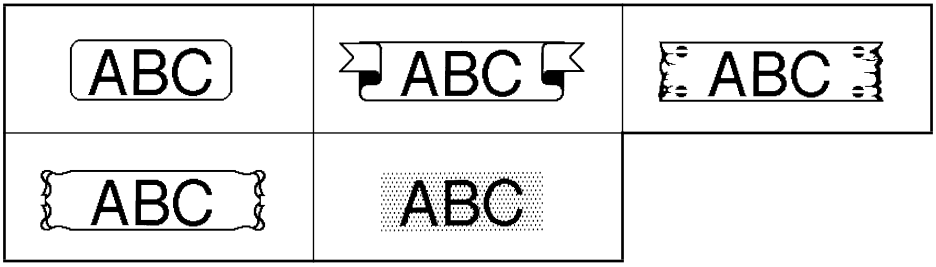


❷ While still holding down Code, continue pressing ABC 6 é until the rounded frame is displayed.



❸ Release Code.

REFERENCE



TAPE MARGIN FUNCTION

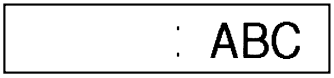
The **Tape margin** function allows you to adjust the size of the margins on the left and right sides of your text.

The default tape margin setting is **FULL**; however, three other settings are also available.

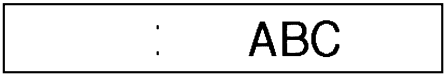
FULL (24 mm margins)

NONE (2 mm margins)

NARROW (4 mm margins)



HALF (12 mm margins)



☞ *After printing using the **NARROW** and **HALF** tape margin settings, push down on the tape cutter lever to cut off the label, and then use scissors to cut along the cutting guide (:) to centre the text within the label.*

To change the tape margin setting:

❶ Rotate Set until **09/18 TAPE** is displayed, and then press Set to display the current tape margin setting.

❷ Rotate Set until the desired tape margin setting is displayed, and then press Set to apply it to the entire text.

OR

❶ While holding down Code, press Tape E once, and keep Code held down to display the current tape margin setting.

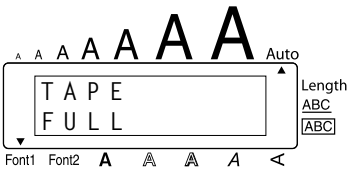
❷ While still holding down Code, continue pressing Tape E until the desired tape margin setting is displayed.

❸ Release Code to apply the selected tape margin setting to the entire text.

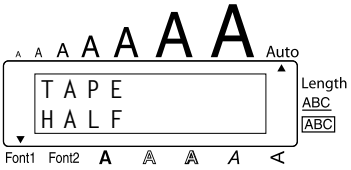
EXAMPLE

To select the HALF tape margin setting:

❶ While holding down Code, press Tape E once, and keep Code held down.



❷ While still holding down Code, continue pressing Tape E until **HALF** is displayed.



❸ Release Code.

HORIZONTAL ALIGNMENT FUNCTION

You can choose to align the text in one of three ways. In addition, if the **Length** function was used to set the length of the label, the text will align within the label according to the selected horizontal alignment setting.

The default horizontal alignment setting is **LEFT**; however, two other settings are also available.

LEFT

AB
CDE
FG

RIGHT

AB
CDE
FG

CENTRE

AB
CDE
FG

To change the horizontal alignment setting:

❶ Rotate Set until **10/18 ALIGNMENT** is displayed, and then press Set to display the current horizontal alignment setting.

❷ Rotate Set until the desired horizontal alignment setting is displayed, and then press Set to apply it to the entire text.

OR

❶ While holding down Code, press H.Ali R€ once, and keep Code held down to display the current horizontal alignment setting.

❷ While still holding down Code, continue pressing H.Ali R€ until the desired horizontal alignment setting is displayed.

❸ Release Code to apply the selected horizontal alignment setting to the entire text.

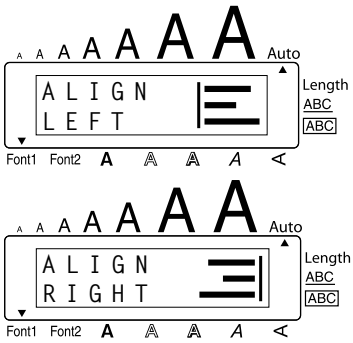
EXAMPLE

To select the RIGHT horizontal alignment setting:

❶ While holding down Code, press H.Ali R€ once, and keep Code held down.

❷ While still holding down Code, continue pressing H.Ali R€ until **RIGHT** is displayed.

❸ Release Code.



MIRROR PRINTING FUNCTION

With this function, you can print your text so that the characters can be read from the adhesive side of the tape. If mirror-printed labels are attached to glass or some other clear material, they can be read correctly from the opposite side.

☞ *When using the **Mirror printing** function, the text should be printed on clear tape.*

The default mirror printing setting is **OFF**.

ON ABC

To turn on or off the mirror printing setting:

❶ Rotate Set until **15/18 MIRROR** is displayed, and then press Set to display the current mirror printing setting.

❷ Rotate Set until the desired mirror printing setting is displayed, and then press Set to apply it to the entire text.

OR

❶ While holding down Code, press Mirror Print once, and keep Code held down to display the current mirror printing setting.

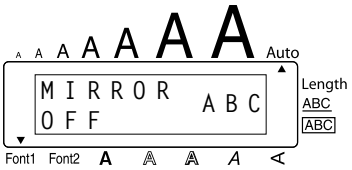
❷ While still holding down Code, continue pressing Mirror Print until the desired mirror printing setting is displayed.

❸ Release Code to apply the selected mirror printing setting to the entire text.

EXAMPLE

To select the ON mirror printing setting:

❶ While holding down Code, press Mirror Print once, and keep Code held down.



❷ While still holding down Code, continue pressing Mirror Print until **ON** is displayed.

❸ Release Code.

LENGTH FUNCTION

Although the length of the printed label automatically adjusts to fit the length of the entered text, there may be times when you will want to make a label with a specific length. The **Length** function allows you to set the label length between 4.0 cm and 30.0 cm.

The default length setting is **OFF**. When the **Length** function is set to **ON**, the **Length** indicator on the right side of the display comes on.

To change the length setting:

1. Rotate Set until **11/18 LENGTH** is displayed, and then press Set (OR while holding down Code, press Length T once, and keep Code held down) to display the current length of the label (the text and both margins) briefly, then display the current label length setting (**ON** or **OFF**).
2. Rotate Set (OR while still holding down Code, continue pressing Length T) until the desired label length setting is displayed.

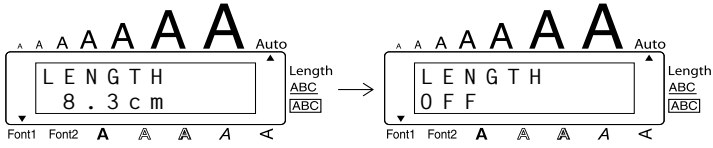
   ☞ *The **Length** indicator comes on when **ON** is selected.*
3. Press Set (OR release Code). If **ON** was selected, the current label length setting is displayed.
4. Rotate Set (OR press Home ▲ or ▼ End) until the desired length is displayed, or use the number keys to type in the length.

   ☞ *To change the length in 1.0-cm-steps, hold down either Home ▲ or ▼ End, and then release the key when the desired setting is displayed.*
5. Press Set (OR press ↵).

EXAMPLE

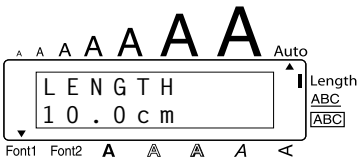
To select a label length of 12 cm:

1. While holding down Code, press Length T once, and keep Code held down.

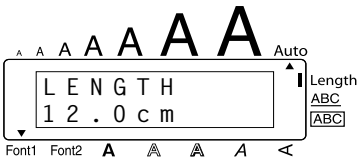


❷ While still holding down Code, continue pressing Length T until **ON** is displayed.

❸ Release Code.



❹ Press Home ▲ until **12.0cm** is displayed.



❺ Press ↵.

PRINT KEY

After you have entered your text and chosen the desired format settings, you are ready to print the label.

To print a label:

- Press Mirror Print once. The message "COPIES" followed by the number of the label being printed is displayed.

EXAMPLE

To print a label:

- Press Mirror Print once.

FEED FUNCTION

The **Feed** function is used to feed out 24 mm of tape.

To feed out 24 mm of tape:

- Hold down Code and press Feed Space once. 24 mm of tape is fed out.

To cut the tape:

- Push down on the tape cutter lever.

  ☞ *In order to prevent damaging the tape, do not try to cut it while printing or feeding. Pushing down on the tape cutter lever too far may break it.*

NUMBERING FUNCTION

This function can be used to print many copies of the same text while increasing a certain number after each label is printed. This type of automatic incrementation is very useful when printing serial number labels, production control labels or other labels requiring ascending numbers.

To use the Numbering function:

1. Press ◁◁ ◄, ▷▷ ►, Home ▲ or ▼ End until the cursor is positioned below the number that you wish to increase.
2. Rotate Set until **14/18 NUMBER** is displayed, and then press Set (OR hold down Code and press Number O ö once). The message "NUMBER UNTIL" and the selected number appears in the display.

   ☞ *To cancel the **Numbering** function at any time, hold down Code and press Number O ö (or press just Clear ⌫).*
3. Rotate Set (OR press Home ▲ or ▼ End) until the last number that is to be printed is flashing, or use the number keys to type in the number.

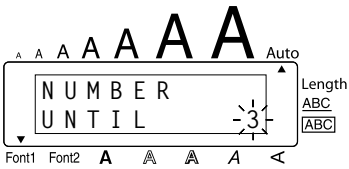
   ☞ *A number lower than the one that was selected cannot be entered.*
4. Press Set (OR press Mirror Print or ↵) to begin printing the labels. The number of each copy is displayed while it is being printed.

EXAMPLE

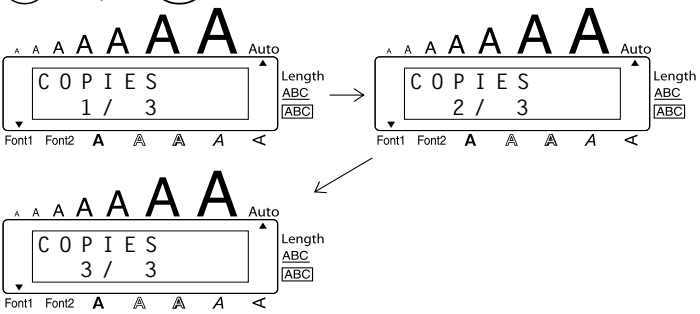
To print three labels with numbers 1, 2 and 3:

❶ Rotate Set until **14/18 NUMBER** is displayed, and then press Set (OR hold down Code and press Number.)

❷ Rotate Set (OR press Home) until **3** is displayed.



❸ Press Set (OR press Mirror Print or ↵).



STUDIO 1 : STUDIO 2 : STUDIO 3

REPEAT PRINTING FUNCTION

This function allows you to print up to 9 copies of the same text.

To use the Repeat printing function:

1. Rotate Set (Repeat) until **13/18 REPEAT** is displayed, and then press Set (OR hold down Code and press I (Repeat)). The message "COPIES" appears in the display.

   ☞ *To cancel the **Repeat printing** function, hold down Code and press I (Repeat) (or press just ⌫ (Clear)).*

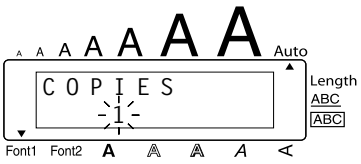
2. Rotate Set (OR press ▲ (Home) or ▼ (End)) until the desired number of copies is displayed, or use the number keys to type in the number.

3. Press Set (OR press Print (Mirror) or ↵) to begin printing the labels. The number of each copy is displayed while it is being printed.

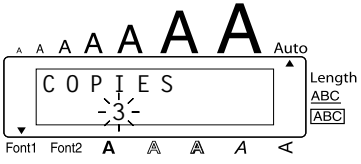
EXAMPLE

To print three copies of a label:

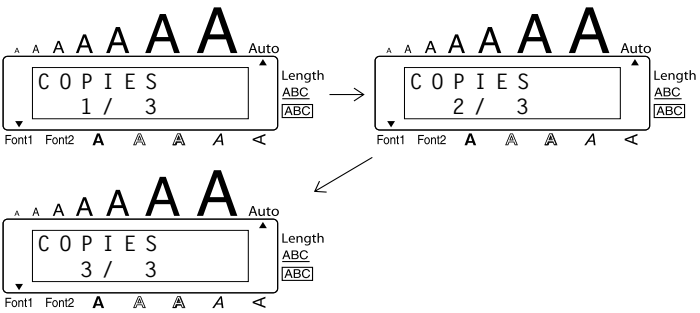
1. Rotate Set until **13/18 REPEAT** is displayed, and then press Set (OR hold down Code and press I (Repeat)).



2. Rotate Set (OR press ▲ (Home)) until **3** is displayed.



❸ Press Set (OR press Mirror Print or ↵).



CURRENCY CONVERSION FUNCTION

With the easy-to-use **Currency conversion** function, euros are automatically converted to or from any currency that you select, and the two prices are added to your text. Simply set up the function by selecting which currency you wish to convert and how you want the prices to appear, and then you can quickly create labels containing prices in both euros and one other currency.

To set up the Currency conversion function:

❶ Rotate Set until **18/18 CONV SETUP** is displayed, and then press Set (OR hold down Code and press Set up once). The message "CURRENCY" appears with the currently selected setting.

☞ *To return to the text without changing any settings for the* ***Currency conversion*** *function, hold down* Code *and press* Set up.

❷ Rotate Set (OR press Home ▲ or ▼ End) until the setting for the desired currency is displayed.

☞ *The following currency settings are available:*
***ATS** (Austrian schilling), **BEF** (Belgian franc), **DEM** (German deutschemark), **ESP** (Spanish peseta), **FIM** (Finnish markka), **FRF** (French franc), **GRD** (Greek drachma), **IEP** (Irish pound), **ITL** (Italian lira), **LUF** (Luxembourg franc), **NLG** (Netherlands guilder), **PTE** (Portuguese escudo), **CHF** (Swiss franc), **DKK** (Danish krone), **GBP** (British pound), **NOK** (Norwegian krone), **SEK** (Swedish krona), **ANY1** (in the format X.XXX,XX), **ANY2** (in the format X,XXX.XX)*

❸ Press Set (OR press ↵).
If a currency setting other than **CHF**, **DKK**, **GBP**, **NOK**, **SEK**, **ANY1** or **ANY2** was selected, the message "SEPARATOR" appears with the currently selected setting for the character that separates the two currencies. In this case, skip to step ❺.
If **CHF**, **DKK**, **GBP**, **NOK**, **SEK**, **ANY1** or **ANY2** was selected, the message "RATE" appears. In this case, continue with step ❹.

❹ Type in the exchange rate for converting a euro into the desired currency, and then press ↵.

☞ *A number with a maximum of 9 digits (excluding the decimal point) can be entered. Pressing either Conv. . ~ ij or Set up , ? ¡ inserts the decimal point into the number.*

❺ Rotate Set (OR press Home ▲ or End ▼) until the setting for the desired separator is displayed, and then press ↵.

☞ *The following separator settings are available: / (slash), **SPACE**, ↵ (return)*

❻ Rotate Set (OR press Home ▲ or End ▼) until the desired setting for the printing order of the euro price is displayed.

☞ *The following settings for printing the euro price are available:*
***1ST** (The euro price is printed before the price in the other currency.), **2ND** (The euro price is printed after the price in the other currency.)*

❼ Press Set (OR press ↵).

To convert a currency to or from euros and add the two values to the text:

❶ Hold down Code and press Conv. . ~ ij once. The currency conversion arrangement that was set up appears.

❷ Rotate Set (OR press ◄◄ ◄ or ► ►►) until the arrow points in the desired conversion direction.

❸ Type in the value that you wish to convert.

☞ *A number with a maximum of 9 digits (excluding the decimal point and limited to 2 decimal digits) can be entered. Pressing either Conv. . ~ ij or Set up , ? ¡ inserts the decimal point into the number. However, a decimal point cannot be added for currencies with a format where a decimal point is not used.*

❹ Press (↵). The value is converted and values in both currencies are added to the text at the cursor's current position.

☞ *The currency values are converted at the following rates, and added to the text using the formats shown.*

Currency	Exchange rate for 1 €	Format	Euro format
ATS	13.7603	öS X.XXX,XX	€ X.XXX,XX
BEF	40.3399	X.XXXBEF	X.XXX,XX€
DEM	1.95583	DM X.XXX,XX	€ X.XXX,XX
ESP	166.386	X.XXX PTA	X.XXX,XX €
FIM	5.94573	X.XXX,XX mk	X.XXX,XX €
FRF	6.55957	X.XXX,XX FF	X.XXX,XX €
GRD	340.750	Drx. X.XXX	€ X.XXX,XX
IEP	0.787564	IR£X,XXX.XX	€X,XXX.XX
ITL	1936.27	L. X.XXX	€ X.XXX,XX
LUF	40.3399	X.XXXLUF	X.XXX,XX€
NLG	2.20371	fl X.XXX,XX	€ X.XXX,XX
PTE	200.482	X.XXXEsc	X.XXX,XX€
CHF	–	X'XXX.XX SwF	X'XXX.XX €
DKK	–	DKK X.XXX,XX	€ X.XXX,XX
GBP	–	£X,XXX.XX	€X,XXX.XX
NOK	–	Nkr X.XXX,XX	€ X.XXX,XX
SEK	–	SEK X.XXX,XX	€ X.XXX,XX
ANY1	–	X.XXX,XX	€ X.XXX,XX
ANY2	–	X,XXX.XX	€ X,XXX.XX

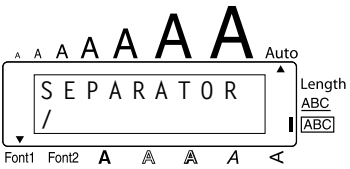
EXAMPLE

To set up the Currency conversion function to convert between euros and Irish pounds:

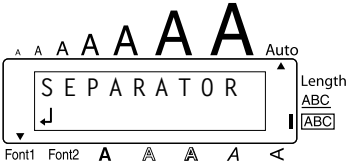
❶ Rotate (Set) until **18/18 CONV SETUP** is displayed, and then press (Set) (OR hold down (Code) and press (Setup ; ?) once).

❷ Rotate Set (OR press Home ▲ or End ▼) until **IEP** is displayed.

❸ Press Set (OR press ↵).



❹ Rotate Set (OR press Home ▲ or End ▼) until ↲ is displayed.



❺ Press Set (OR press ↵).

❻ Since **1ST** is already displayed in this example, press Set (OR press ↵).

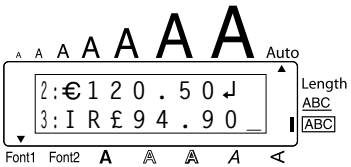
To convert a price in Irish pounds to euros and add the two prices to the text:

❶ Hold down Code and press Conv. (. ij) once.

❷ Press ◄ so that the arrow points to the left.

❸ Type “94.90”.

❹ Press Set (OR press ↵).



MEMORY FUNCTIONS

You can use the memory to store your most frequently used text files. The text remains in the memory, along with its formatting, even after all characters are removed from the display using the **Clear** function (holding down Code and pressing Clear).

When each file is stored, it is given a number to make recalling it easier. Up to 10 text files or approximately 300 characters can be stored in the memory. Each stored text file can have a maximum of 91 characters.

Since a copy of the stored text file is recalled when the **Recall** function is used, the text can be edited or printed without changing the originally stored file. When a file is no longer needed or more space is necessary, the **Memory delete** function can be used to delete it.

☞ *When inserting new batteries, be sure to insert the new ones within five minutes of removing the old ones, otherwise any text files stored in the memory will be lost (unless the machine is plugged into an electrical outlet with the AC adaptor).*

STORING TEXT

To store a text file:

❶ Do either of the following:

• Rotate Set until **07/18 MEMORY** is displayed, and then press Set. Then, rotate Set until **STORE** is displayed, and then press Set.

OR

• Hold down Code and press Store (& 7 è).

The message "STORE" appears in the display with the first available file number.

☞ *To quit the **Store** function without storing the text, hold down Code and press Store (& 7 è) (or press just Clear).*

❷ Rotate Set (OR press Home ▲ or ▼ End) until the desired file number where you wish to store the text is displayed.

❸ Press Set (OR press ↵). The text is stored under the selected file number and the text previously shown in the display reappears.

☞ *If a file is already stored under the selected file number, the message "OVERWRITE?" appears in the display and you must decide whether or not to overwrite it (delete it from the memory and store the new one).*

☞ *If the maximum number of characters has already been stored, the error message "MEMORY FULL!" appears in the display.*

To overwrite the stored file with the new one:

● Press Set (OR press ↵). The previously stored file is deleted and the new one is stored under the selected number.

☞ *To go back and choose another file number without overwriting the text file, press Clear , and then select a different file number.*

RECALLING TEXT

To recall a text file:

❶ Do either of the following:

• Rotate Set until **07/18 MEMORY** is displayed, and then press Set. Then, rotate Set until **RECALL** is displayed, and then press Set.

OR

• Hold down Code and press Recall (8 ì).

The message "RECALL" appears in the display with the file number and beginning of the most recently stored or recalled text.

☞ *To quit the **Recall** function without recalling text, hold down Code and press Recall (8 ì) (or press just Clear ⌫).*

❷ Rotate Set (OR press Home ▲ or ▼ End) until the file number containing the text that you wish to recall is displayed. The text stored under the selected file number is shown.

☞ *To see other parts of the selected text file, press ◄◄ or ►►.*

To display the text stored under other file numbers, rotate Set (OR press Home ▲ or ▼ End).

❸ Press Set (OR press ↵). Any text previously entered in the display is erased and the text stored under the selected file number is recalled into the display.

DELETING A FILE

To delete a text file:

❶ Do either of the following:

• Rotate Set until **07/18 MEMORY** is displayed, and then press Set. Then, rotate Set until **CLEAR** is displayed, and then press Set.

OR

• Hold down Code and press M.Del (9 ò).

The message "CLEAR" appears in the display with the file number and beginning of the most recently stored or recalled text.

☞ *To cancel the **Memory delete** function without deleting the text file, hold down Code and press M.Del (9 ò) (or press just Clear ⌫).*

❷ Rotate Set (OR press Home ▲ or ▼ End) until the file number containing the text that you wish to delete is displayed. The text stored under the selected file number is shown.

☞ *To see other parts of the selected text file, press ◄◄ or ►►.*

To display the text stored under other file numbers, rotate Set (OR press Home ▲ or ▼ End).

❸ Press Set (OR press ↵). The message "OK TO CLEAR?" appears.

☞ *To go back and select a different text file, press Clear.*

❹ Press Set (OR press ↵). The text file that was selected is deleted.

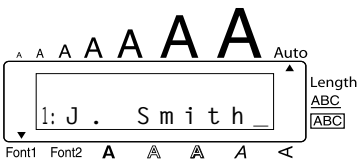
EXAMPLE

To store text under file number 4:

❶ Hold down Code and press Store (& 7 è).

❷ Rotate Set (OR press Home ▲ or ▼ End) until file number **4** is displayed.

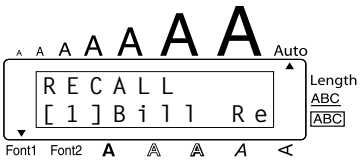
❸ Press ↵.



To recall the text from file number 1:

❶ Hold down Code and press Recall (8 i).

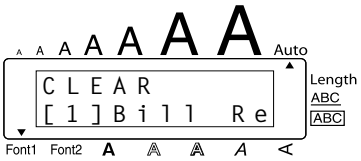
❷ Rotate Set (OR press Home ▲ or ▼ End) until file number **1** is displayed.



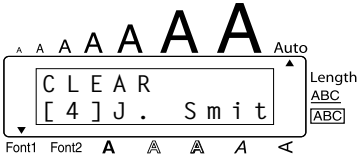
❸ Press ↵.

To delete the text stored under file number 4:

❶ Hold down Code and press M.Del (9 ò).



❷ Rotate Set (OR press Home ▲ or ▼ End) until file number **4** is displayed.



❸ Press ↵.

❹ Press ↵.

TROUBLESHOOTING

Problem	Remedy
1. The display stays blank after you have turned on the machine.	• Check that the AC adaptor is connected correctly. • If you are using alkaline batteries, check that they are correctly inserted. • If the batteries are low, replace them with new ones.
2. The machine does not print or the printed characters are blurred.	• Check that the tape cassette has been inserted properly. • If the tape cassette is empty, replace it with a new one. • Make sure that the tape compartment cover has been fully closed.
3. The text files that you stored in the memory are no longer there.	• If the batteries are low, replace them with new ones.
4. The printed characters are not formed properly.	• If you are using alkaline batteries, they may be low. Try using the AC adaptor or replace the batteries with new ones.
5. A blank horizontal line appears through the printed label.	• Clean the print head as explained on page 10.
6. Striped tape appears.	• You have reached the end of the tape. Replace the tape cassette with a new one.
7. The machine has "locked up" (i.e., nothing happens when a key is pressed).	• Turn off the machine, and then while holding down Code and H.Ali R€, turn the machine back on. The text and formats in the display and all text files stored in the memory are erased.

ERROR MESSAGE LIST

Error Message	Cause	Remedy
5 LINE LIMIT!	This message appears if five lines already exist when you press (↵).	Limit the number of lines to five.
BATTERIES WEAK!	This message appears when the installed alkaline batteries become weak.	Replace the batteries or use the AC adaptor.
BUFFER EMPTY!	• This message appears if you hold down (Code) and press (Length T), but no text has been entered in the display. • This message appears if you try to print, but no text has been entered in the display.	• Enter some text before starting this function. • Enter text before printing.
BUFFER FULL!	This message appears if you try to enter a character, symbol, return or space after the maximum number of characters has already been entered.	Delete some existing text so that more text can be entered.
COOLING DOWN	This message appears when the print head is used extensively (for example, when printing multiple copies of a large amount of text).	Wait until printing continues.
CUTTER ERROR!	This message appears if the tape cutter is closed when you try to print or feed the tape.	Wait until printing continues.
DIVIDE BY ZERO ERROR	This message appears if a currency conversion rate of 0 is set.	Set a conversion rate of more than 0.

Error Message	Cause	Remedy
LENGTH LIMIT!	• This message appears if the text is longer than 1 metre when you try to print. • This message appears if the **Length** function is used to set a label length that is less than 4.0 cm or more than 30.0 cm. • This message appears if the **Tab Length** function is used to set a tab length that is more than 30.0 cm.	• Shorten the text to less than 1 metre before trying to print. • Set the label length between 4.0 cm and 30.0 cm. • Set the tab length so that it is less than 30.0 cm.
LINE LIMIT!	This message appears if the number of lines in the text is greater than the maximum number of lines possible for the installed tape.	Reduce the number of lines or install a tape of greater width.
MEMORY FULL!	This message appears if you try to store a text file after the maximum number of characters has already been stored in the memory.	Delete an unwanted file to make room for the new one.
NO FILES!	This message appears if you try to recall or delete a text file from the memory when none are stored.	Store a text file first.
NOT HERE!	This message appears if the cursor is at the end of the text when you try to use the **Numbering** function.	Move the cursor below a number before trying to use the **Numbering** function.
OVERFLOW	This message appears if the calculated currency conversion result exceeds 10 digits.	Enter a smaller value.
REPLACE BATTERIES!	This message appears if the installed alkaline batteries are about to run out.	Replace the batteries or use the AC adaptor.
ROM PROBLEM!	This message appears if there is a problem with the machine's read only memory.	Turn off the machine, and then while holding down Code and H.Ali R €, turn the machine back on. Contact your service representative.

Error Message	Cause	Remedy
TAB LIMIT!	This message appears if the maximum number of tabs has already been added to the text when you hold down Code and press Tab Set Q.	Limit the number of tabs in the text to 50.
TAPE EMPTY!	This message appears if you try to print a label or feed the tape when no tape cassette is installed.	Install a tape cassette and try again.
TEXT TOO HIGH!	This message appears if the size of the text is larger than the width of the installed tape when the **Length** function is used.	Reduce the size of the characters or install a wider tape.
TEXT TOO LONG!	This message appears if the length of the text is longer than the label length that has been set using the **Length** function.	Delete some of the text, reduce the character width or increase the set label length.
WRONG ADAPTER!	This message appears if a high-voltage adaptor is being used.	Remove the high-voltage adaptor and connect the adaptor designed exclusively for this machine.
WRONG CHAR!	This message appears if the cursor is not below a number when you try to use the **Numbering** function.	Move the cursor below a number before trying to use the **Numbering** function.

SPECIFICATIONS

HARDWARE

Input Device: Keyboard - 51 keys

LCD: 10 characters × 2 lines
20 indicators (including **Alt** and **Caps**)

Print Tape: Pressure-sensitive, Adhesive-based
8 metres long
Four widths available:
- 6 mm
- 9 mm
- 12 mm
- 18 mm

Power Supply: Six AA alkaline batteries (AM3, LR6) or AC adaptor (model H or J)
Auto power-off if no key is pressed for 5 minutes

Print Head: 112 dot / 180 dpi

Dimensions: 181 mm (W) × 232.5 mm (D) × 61.4 mm (H)

Weight: 800 g (without a tape cassette and batteries installed)

SOFTWARE

Buffer Size: Maximum 91 characters
Maximum five lines

Memory Size: Approx. 300 characters

Character Size: Seven sizes (6, 9, 12, 18, 24, 36 and 42 points) + 52 point (uppercase letters only on 18-mm-wide tape)
All are available in normal and wide widths

Print Styles: Normal, Bold, Outline, Shadow
(each can be combined with Italic), and Vertical

ACCESSORIES

- **Supplies**
  Obtain tape cassettes from your nearest authorised dealer.
  Use only Brother TZ tapes with this machine. **Brother cannot be held responsible for trouble caused by the use of unauthorised supplies**. Do not use tapes that do not have the TZ TAPE mark.

Stock No.	Description
18-mm-wide laminated tapes	
TZ-141	Black characters on clear adhesive
TZ-241	Black characters on white adhesive
TZ-242	Red characters on white adhesive
TZ-243	Blue characters on white adhesive
TZ-344	Gold characters on black adhesive
TZ-145	White characters on clear adhesive
TZ-345	White characters on black adhesive
TZ-441	Black characters on red adhesive
TZ-541	Black characters on blue adhesive
TZ-641	Black characters on yellow adhesive
TZ-741	Black characters on green adhesive
12-mm-wide laminated tapes	
TZ-131	Black characters on clear adhesive
TZ-132	Red characters on clear adhesive
TZ-133	Blue characters on clear adhesive
TZ-135	White characters on clear adhesive
TZ-231	Black characters on white adhesive
TZ-232	Red characters on white adhesive
TZ-233	Blue characters on white adhesive
TZ-334	Gold characters on black adhesive
TZ-335	White characters on black adhesive
TZ-431	Black characters on red adhesive
TZ-435	White characters on red adhesive
TZ-531	Black characters on blue adhesive
TZ-535	White characters on blue adhesive
TZ-631	Black characters on yellow adhesive
TZ-635	White characters on orange adhesive
TZ-731	Black characters on green adhesive
TZ-735	White characters on green adhesive
TZ-931	Black characters on silver adhesive
TZ-M931	Black characters on silver (mat) adhesive
TZ-A31	Black characters on grey adhesive

Stock No.	Description
TZ-B31	Black characters on fluorescent orange adhesive
TZ-C31	Black characters on fluorescent yellow adhesive
TZ-D31	Black characters on fluorescent green adhesive
TZ-M31	Black characters on clear (mat) adhesive
9-mm-wide laminated tapes	
TZ-121	Black characters on clear adhesive
TZ-122	Red characters on clear adhesive
TZ-123	Blue characters on clear adhesive
TZ-221	Black characters on white adhesive
TZ-222	Red characters on white adhesive
TZ-223	Blue characters on white adhesive
TZ-324	Gold characters on black adhesive
TZ-325	White characters on black adhesive
TZ-421	Black characters on red adhesive
TZ-521	Black characters on blue adhesive
TZ-621	Black characters on yellow adhesive
TZ-721	Black characters on green adhesive
TZ-A25	White characters on grey adhesive
TZ-M21	Black characters on clear (mat) adhesive
6-mm-wide laminated tapes	
TZ-111	Black characters on clear adhesive
TZ-211	Black characters on white adhesive
TZ-315	White characters on black adhesive
TZ-611	Black characters on yellow adhesive
18-mm-wide non-laminated tapes	
TZ-N241	Black characters on white adhesive
TZ-N242	Red characters on white adhesive
TZ-N243	Blue characters on white adhesive
TZ-N541	Black characters on blue adhesive
TZ-N641	Black characters on yellow adhesive
TZ-N741	Black characters on green adhesive
TZ-NF41	Black characters on purple adhesive
TZ-PH41	Black characters on adhesive with a heart design
TZ-PF41	Black characters on adhesive with a fruit design
TZ-PM41	Black characters on adhesive with a marine design
12-mm-wide non-laminated tapes	
TZ-N231	Black characters on white adhesive
TZ-N232	Red characters on white adhesive
TZ-N233	Blue characters on white adhesive
TZ-N531	Black characters on blue adhesive

Stock No.	Description
TZ-N631	Black characters on yellow adhesive
TZ-N731	Black characters on green adhesive
TZ-NF31	Black characters on purple adhesive
9-mm-wide non-laminated tapes	
TZ-N221	Black characters on white adhesive
6-mm-wide non-laminated tapes	
TZ-N211	Black characters on white adhesive

Strong adhesive tapes

Stock No.	Description
TZ-S241	18 mm strong adhesive tape (black characters on white adhesive)
TZ-S231	12 mm strong adhesive tape (black characters on white adhesive)
TZ-S221	9 mm strong adhesive tape (black characters on white adhesive)
TZ-S211	6 mm strong adhesive tape (black characters on white adhesive)
TZ-S141	18 mm strong adhesive tape (black characters on clear adhesive)
TZ-S131	12 mm strong adhesive tape (black characters on clear adhesive)
TZ-S121	9 mm strong adhesive tape (black characters on clear adhesive)
TZ-S111	6 mm strong adhesive tape (black characters on clear adhesive)
TZ-S641	18 mm strong adhesive tape (black characters on yellow adhesive)
TZ-S631	12 mm strong adhesive tape (black characters on yellow adhesive)
TZ-S621	9 mm strong adhesive tape (black characters on yellow adhesive)
TZ-S611	6 mm strong adhesive tape (black characters on yellow adhesive)

Special tapes

Stock No.	Description
TZ-CL4	Print head cleaning cassette
TZ-IY41	18 mm iron-on transfer tape
TZ-SE4	18 mm security tape
TZ-FA3	12 mm fabric tape

INDEX

A

AC adaptor 4
accented characters 24
adding
  new lines 16
  spaces 16
  tabs 17
aligning 39
Alt key 14
automatic formatting 27

B

backing label 6
batteries 3

C

Caps mode 15
cleaning
  machine 3
  print head 10
  rollers 10
clearing 21
  all text 21
  text and formats 21
Code key 13
composite characters 23
confirming 17
currency conversion 47
cursor keys 11

D

deleting 53
  all text 21
  characters 19
  text lines 20

E

entering
  accented characters 14, 24
  composite characters 23
  spaces 16
  symbols 14, 26
  tabs 17
  uppercase letters 15
error messages 57

F

fabric tape 9
Feed function 44
fonts 29
formatting 27
frames 36
functions 13

I

incrementing 44
instant-lettering tape 7
iron-on transfers 7

K

keyboard 2

L

laminated tape 6
Length function 42

M

margins 38
memory 51
mirror printing 40
multiple copies 46

N

navigation dial 13
non-laminated tape 6
Numbering function 44

O

overwriting 52

P

power 11
print head 10
print head cleaning cassette 10
printing 43

R

recalling 53
Repeat printing function 46
return key 16
rub-on transfers 7

S

Shift key 15
size 30
spaces 16
specifications 60
storing 52
style 33
symbols 26

T

tab length 18
tabs 17
tape cassette 5
tape cutter lever 5
tape length 42
text
  alignment 39
  size 30
  style 33
  underlining 35
  width 30
text lines 16
troubleshooting 56

U

underlining 35
uppercase letters 15

W

width 30

Printed in China
LA7776001